



GROUND TECHNOLOGY



Permeability and Drainage

On sites where storm water cannot be dispersed via streams or ditches, traditional soakaways can be the only option. Soakaways are effectively storm water collectors in the ground which gradually allow percolation of water into the surrounding soil. An important aspect of effective soakaway design and adequate functionality is the infiltration characteristics of the ground. In order for the soakaway to perform adequately, this must be determined.

Our team of site investigation specialists and engineers are able to conduct a variety of tests in order to determine whether soakaway drainage is feasible. We can design soakaways based on the characteristics of your site. Our field engineers and technicians are trained and experienced in carrying out a variety of tests in accordance with the following methods and standards:

- NHBC: Chapter 5.3; Percolation Test for Surface Water Soakaways
- BS 5930: 1999; Falling Head Test in Boreholes
- BRE Digest 365; Falling Head Test in Trial Pits
- BS 5930; 1999; Constant Head Test in Boreholes

Depending on the scale of the site, volumes of water to be discharged and geological and groundwater profile, we carry out one of the above tests in convenient locations on your site.

Sustainable Urban Drainage Systems (SUDS) are a common requirement for new developments to enable slow, controlled release of storm water into the natural environment.

SUDS are also required where low ground permeability means traditional shallow or deeper bored soakaways are not a viable option. The alternative approach of SUDS enables the effective management of storm water at source, and includes methods such as swales, attenuation ponds, rainwater harvestings or use of permeable pavements.

Where SUDS are required, our team of engineers are able to provide you with specialist guidance and design advice on the most appropriate drainage choice. In conjunction with our specialist ground investigation team we are able to design the most practical and economical solution whatever the site restrictions and ground conditions.